

Product Details and Certifications

Cross Reference RA Part Number: 306697

Product: 20-COMM-H

Description: PowerFlex Architecture Class RS-485 HVAC to DPI
Communication Adapter



Representative Photo Only (actual product may vary based on configuration selections)

~~CDH~~~~CBG~~~~IN~~: ~~CFA5~~~~HCB~~

Communications Kits	PF750-Series Communication Adapter
Network Protocol:	Modbus RTU, Metasys N2 or Siemens P1 FLN
Network Data Rate:	RTU: 4800...38400 bps, N2: 9600 bps, P1: 4800 or 9600 bps
Drive Protocol:	DPI
Drive Data Rate:	125 or 500 Kbps
Consumption Drive (DPI):	150mA at 5V DC
Consumtion Network:	None

Specifications - Communication Options and Accessories



	20-750-CNETC	20-COMM-C	20-750-DNET	20-COMM-D	20-COMM-E	20-COMM-H
Network Protocol: Data Rate:	ControlNet 5 Mbps (fixed)	ControlNet 5 Mbps	DeviceNet 125, 250, and 500 kbps	DeviceNet 125, 250, and 500 kbps	EtherNet/IP 10/100 Mbps, Half/Full Duplex	Modbus RTU, Metasys N2 or Siemens P1 FLN RTU: 4800...38400 bps N2: 9600 bps P1: 4800 or 9600 bps
Drive Protocol: Data Rates:	DPI 500 Kbps	DPI 125 or 500 Kbps	DPI 500 Kbps	DPI 125 or 500 Kbps	DPI 125 or 500 Kbps	DPI 125 or 500 Kbps
Consumption Drive (DPI): Network:	250 mA at 14V DC None	275 mA at 5V DC None	50 mA at 14V DC 60 mA at 24V DC	150 mA at 5 VDC 60 mA at 24 VDC	370 mA at 5 VDC N/A	150 mA at 5 VDC N/A
Dimensions: H x L x W	68.0 x 150.0 x 26.0 mm (2.70 x 5.90 x 1.00 in.)	16.0 x 103.0 x 80.0 mm (0.62 x 4.00 x 3.13 in.)	68.0 x 150.0 x 26.0 mm (2.70 x 5.90 x 1.00 in.)	19.0 x 86.0 x 78.5 mm (0.75 x 3.39 x 3.09 in.)	19.0 x 86.0 x 78.5 mm (0.75 x 3.39 x 3.09 in.)	19.0 x 86.0 x 78.5 mm (0.75 x 3.39 x 3.09 in.)
Weight:	62 g (2.1 oz.)	85 g (3 oz)	62 g (2.1 oz.)	85 g (3 oz)	85 g (3 oz)	85 g (3 oz)
Compliance UL: c-UL: CE: C-Tick:	UL508C CAN/CSA C22.2 No. 14-05 EN61800-3 EN61800-3	UL508C CAN/CSA C22.2 No. 14 EN50178 and EN61800-3 EN61800-3	UL508C CAN/CSA C22.2 No. 14 EN61800-3 EN61800-3	UL508C CAN/CSA C22.2 No. 14 EN50178 and EN61800-3 EN61800-3	UL508C CAN/CSA C22.2 No. 14 EN50178 and EN61800-3 EN61800-3	UL508C CAN/CSA C22.2 No. 14 EN50178 and EN61800-3 EN61800-3

Communication Option Kits

Description	Cat. No.	Used with PowerFlex Drive		AFE
		70	753/755	
BACnet/IP Option Module	20-750-BNETIP		✓	
BACnet® MS/TP RS485 Communication Adapter	20-COMM-B	✓		✓
Coaxial ControlNet™ Option Module	20-750-CNETC		✓	
ControlNet™ Communication Adapter (Coax)	20-COMM-C	✓	✓ (1)	✓
DeviceNet™ Option Module	20-750-DNET		✓	
DeviceNet™ Communication Adapter	20-COMM-D	✓	✓ (1)	✓
Dual-port EtherNet/IP Option Module	20-750-ENETR		✓	
EtherNet/IP™ Communication Adapter	20-COMM-E	✓	✓ (1)	✓
Dual-port EtherNet/IP™ Communication Adapter	20-COMM-ER	✓		✓
HVAC Communication Adapter	20-COMM-H	✓	✓ (1)	✓
CANopen® Communication Adapter	20-COMM-K	✓	✓ (1)	✓
LonWorks® Communication Adapter	20-COMM-L	✓	✓ (1)	✓
Modbus/TCP Communication Adapter	20-COMM-M	✓	✓ (1)	✓
Profibus DPV1 Option Module	20-750-PBUS		✓	
Single-port Profinet I/O Option Module	20-750-PNET		✓	
Dual-port Profinet I/O Option Module	20-750-PNET2P		✓	
PROFIBUS™ DP Communication Adapter	20-COMM-P	✓	✓ (1)	✓
ControlNet™ Communication Adapter (Fiber)	20-COMM-Q	✓	✓ (1)	✓
Remote I/O Communication Adapter (2)	20-COMM-R	✓	✓ (1)	✓
RS485 DF1 Communication Adapter	20-COMM-S	✓	✓ (1)	✓
External Communications Kit Power Supply	20-XCOMM-AC-PS1	✓	✓	✓
DPI External Communications Kit	20-XCOMM-DC-BASE	✓	✓	✓
External DPI I/O Option Board (3)	20-XCOMM-IO-OPT1	✓	✓	✓
Compact I/O Module (3 Channel)	1769-SM1	✓	✓	✓

(1) Requires a Communication Carrier Card (20-750-20COMM or 20-750-20COMM-F1). Refer to PowerFlex 750-Series Legacy Communication Compatibility for details.

(2) This item has Silver Series status.


(3) For use only with DPI External Communications Kits 20-XCOMM-DC-BASE.

PowerFlex 750-Series Legacy Communication Compatibility

Most legacy communication adapters (20-COMM) can be used with the PowerFlex 753/755. However, the restrictions stated below do apply.

Frame 1 - It is recommended that the 20-750-20COMM-F1 Communication Carrier Card only be installed in Port 4. Port 5 will not be accessible when this module is installed.

Frames 2 and larger - It is recommended that the 20-750-20COMM Communication Carrier Card be installed in Port 6. Using Port 4 or 5 will make the adjacent left port inaccessible to other option modules and may interfere with network cable connections.

Adapter		Accesses Ports 0...6 for I/O Connections (Implicit and Explicit Messaging)	Accesses Ports 7 and Higher (I/O, Explicit Messaging)	Supports Drive Add-on Profiles	Supports Asian- Languages ⁽¹⁾
Cat. No.	Type				
20-COMM-B	BACnet MS/TP	Not Compatible			
20-COMM-C	ControlNet (Coax)	✓ v3.001 ⁽²⁾	✓ v3.001 ⁽²⁾	✓ ⁽³⁾	✓ v3.001 ⁽²⁾
20-COMM-D	DeviceNet	✓ ⁽⁴⁾	Not Compatible		
20-COMM-E	EtherNet/IP	✓ v4.001 ⁽²⁾	✓ v4.001 ⁽²⁾	✓ ⁽³⁾	✓ v4.001 ⁽²⁾
 20-COMM-H	RS-485 HVAC	✓ v2.009 ^{(5) (2)}	Not Compatible		
20-COMM-K	CANopen	✓ v1.001 ⁽²⁾			
20-COMM-L	LonWorks	✓ v1.007 ⁽²⁾			
20-COMM-M	Modbus/TCP	✓ v2.001 ⁽²⁾	✓ v2.001 ⁽²⁾	Not Compatible	✓ v2.001 ⁽²⁾
20-COMM-P	ControlNet (Fiber)	✓ v1.006 ⁽²⁾	✓ v1.006 ⁽²⁾		Not Compatible
20-COMM-Q	PROFIBUS DP	✓ v3.001 ⁽²⁾	✓ v3.001 ⁽²⁾	✓ ⁽³⁾	✓ v3.001 ⁽²⁾
20-COMM-R ⁽⁶⁾	Remote I/O	✓ ⁽⁴⁾	Not Compatible		
20-COMM-S	RS-485 DF1	✓ ⁽⁴⁾			

- (1) Chinese, Japanese, and Korean languages are supported at the time of publication.
- (2) Requires this adapter firmware version or higher.
- (3) Requires firmware version v1.05 or higher of the drive Add-on Profiles for Studio 5000 Logix Designer software.
- (4) Controller must be capable of reading/writing 32-bit floating point (REAL) values.
- (5) Supports all three modes of operation (RTU, P1, N2).
- (6) This item has Silver Series status.

Communication Accessories

Description	Cat. No.	Used with PowerFlex Drive		AFE
		70	753/755	
Serial Null Modem Adapter	1203-SNM	✓	✓	✓
Smart Self-powered Serial Converter (RS232) includes 1203-SFC and 1202-C10 Cables	1203-SSS	✓	✓	✓
Universal Serial Bus™ (USB) Converter includes 2m USB, 20-HIM-H10 and 22-HIM-H10 Cables	1203-USB	✓	✓	✓
ControlNet T-tap Straight	1786-TPS		✓	
Communication Carrier Card for PowerFlex 750-Series Frame 1 drives	20-750-20COMM-F1		✓	
Communication Carrier Card for PowerFlex 750-Series Frame 2 or higher drives	20-750-20COMM		✓	